

even more than silver, for without tin bronze cannot be produced. The Celts may have had some skill in metallurgy, as they taught the Romans the art of tinning utensils, and were taught by them the fabrication of coins. Important mines were worked in the Scilly Islands and in Cornwall. If Carthaginian or Phœnician vessels ever rounded the west coast of France or entered the Channel, they must have been in quest of tin, and probably too of *débouchés* for their manufactured bronze. At all events there was intercourse between the northern countries and the Mediterranean by land. That such land traffic existed is proved by the early foundation and prosperity of Massilles; moreover, the lumps of tin ore which have been found among the Swiss relics of the bronze age must have reached Helvetia by inland commerce. It was owing to the presence of tin that the Celts of Gaul and Britain were of far higher social development than the Teutons of the time of Cæsar. The possession of an article of export so indispensable, and the fact that tin was in such great request in the age of bronze, was in itself the means of promoting civilization, for commerce at a very early period brought the Britons into contact with the Mediterranean nations, and especially with the Etruscans, the great bronze-smiths of antiquity. The inhabitants of the coast of the North Sea, and still more of the Baltic, possessed an analogous property in amber. It is doubtless to this coveted substance that the numerous "finds" on the shores of the Baltic are due, where Greek and Roman coins, as well as bronze instruments, were brought, some by way of the Euxine and Pannonia, along the Danube, some along the Rhone and the Rhine, and even some few across the huge barrier of the Alps.

The obsidian blades which are occasionally met with in ancient graves to the east of the Mississippi must have reached by barter the places where they are now discovered. We must not imagine that the Redskins had no intercourse but that of murderous feuds. Merchant boats passed along the great rivers, and transit dues were taken by the chiefs. In South America, curare, the arrow poison, the preparation of which was understood only by a few hordes, formed a valuable article of commerce among the Indians of the Amazon, so that people living near the Napo were obliged to make canoe voyages of three months' duration in order to procure it. Even where bands of hawkers and pedlars did not wander through the country, goods, such as nephrit hatchets, salt, curious shells, colouring stuffs, were bartered between horde and horde; and thus a system of intercourse might have extended throughout an entire quarter of the world. English wares, deposited at Mombas on the eastern side of South Africa, have been recognized at Mogador, on the west coast of Northern Africa. From these circumstances we assume that commerce has existed in remote ages and among most inhabitants of the world. And we must not lose sight of the fact that if we find trade and emporiums in one place, some corresponding industries and manufactures must exist elsewhere in connexion with them.

*V. Family Development.*—To say that of all institutions the family is the oldest and most sacred, that from it all social rights and duties are derived, like branches from the parent stem, would be considered a truism. Nothing looks more plausible than the universal traditions, apparently well founded on historical records, according to which the founder of the nation, the ancestor, as he is called, had sons, who founded families, which increasing at every generation, became so many tribes, which coalesced as time went on. Historians and moralists have not been slow to credit the poets whose idylls described in glorious colours these primitive families. It was the belief that, notwithstanding the expulsion of man from paradise, and the

murder of Abel by his brother Cain, the progenies of our first parents led a gladsome life, scarcely less innocent than it was when lambs and lions frolicked together on the banks of the Gihon and the Pison. Directly after the deluge the so-called patriarchal family is thought to have arisen. Perhaps even then it was a little tainted with polygamy and some other minor defects, but on the whole, it was a model of virtue, worthy to be set as an example to a degenerate posterity. Modern research flatly contradicts this common-place romance, denies these self-evident propositions which have become historical axioms. Science is no longer of opinion that tribes and nations have been evolved from the family; on the contrary, it holds that the family has been evolved from tribes and hordes. It is not denied that the first step in the path of material and moral progress began with the rearing of a family, and that family cares have been the most powerful agents of civilization, but it is denied that the family has existed in a perfect state from the beginning. The family had to grow like every thing else. As we see it now, it is an institution of a comparatively recent date.

In the same manner the belief, conscious or unconscious, has prevailed in most minds that monogamy was the first law of marriage, and that polygamy and polyandry have been wilful departures from a known rule. The reverse appears now to be the fact. In a book which was published as far back as 1861 Professor Bachofen of Basel propounded a theory, deduced from a careful study of classical literature, that true marriage, unknown to the hunting, the fishing, and the nomadic tribes, arose with the spreading of agriculture, the husbandman wedding the wife at the same time that he wedded the soil. Previous to "husbandry" in both senses of the word, previous to any regulation in the matter, the females and the children, he contends, were the common property of all the males of the tribe. In some legends this state of things was symbolized by the spontaneous vegetation of the marshes, rushes and wild asparagus. But the woman, spoil of the victors, passed or knocked about from man to man, and even from tribe to tribe, yearned after a better regulated state of things. Under her influence, the rudiments of the family grew into shape. Paternity was an idea which did not and could not have a place in such societies. A child had a hundred fathers or none, but he had one mother; he knew the breasts which had given him suck. In this state of human relations, descent was traced exclusively through mothers. The first kinship was between the offspring of a common female ancestor. To trace descent through the male is an idea of far later date. By this discovery (for it deserves to be ranked as a discovery) a flood of light was thrown on a whole region of the obscure past. It is assumed that under the influence of the then recent idea of motherhood diverse religions arose, all having as principle the worship of Mother Earth, Demeter. And starting from the supposition that religions have been always the expression of the deepest thought and the loftiest aspirations of their worshippers, that practice was the exact counterpart of philosophy, Professor Bachofen inferred that, the Divine Mother having been recognized as the fountain of existence and the source of all right, the human mother was likewise the fountain of authority; and that in some places, and for a certain period at least, woman as such had exercised political power, and had enjoyed a certain degree of social supremacy, a startling conclusion, which the stories and traditions respecting Oriental queens did not sufficiently justify.

In originating the theory of *gynæocracy* so-called, the limit of valid deduction had been overstepped, but the great law of maternal filiation has proved sound. Meanwhile, in his *Essay on Primitive Marriage*, M'Lennan

had come to the same conclusions as the author of *Mutterrecht*, about the system of kinship through females only. He made the system clear, not by abstract and far-fetched considerations, or on scanty testimony transmitted by Herodotus, Hesiod, or Æschylus, but by the unmistakable instances which ethnography most abundantly supplies. It is now admitted as a fact that maternal kinship was anterior to the paternal, or, as Sir John Lubbock puts it, "children were not in the earliest times regarded as related equally to their father and their mother; but the natural progress of ideas is, first, that a child is related to his tribe generally; secondly, to his mother, and not to his father; thirdly, to his father, and not to his mother; lastly, and lastly only, that he is related to both." M'Lennan had been led to formulate the principle by a careful study of that old Roman legend, the Rape of the Sabines. He demonstrated that the legend was in accordance, not only with the practice still prevalent in many savage countries of capturing wives by violence, but with the sham fights and mock scuffles which, even in our days and in Europe, take place between the bridegroom's party, pretending to carry off the bride, and the bride's party, pretending to ward off the bridegroom's attack. He showed that the symbol implied something more than the mere lawlessness of savages, and proved the fact that at one time wives were systematically obtained by theft or force. And as real capture could not have been practiced by peaceful neighbours in the midst of the same community, it was necessary to infer that wives were captured from other tribes, whence the distinction between *exogamous* tribes, marrying outside the pale of their community, and *endogamous* tribes, marrying within it. He supposes that the origin of exogamy is to be connected with the practice in early times of female infanticide, which, rendering women scarce, led at once to polyandry within the tribe, and the capturing of women from without. To tribes surrounded with enemies, struggling against the difficulties of existence, sons were a source of strength, both for defence and in the quest for food; daughters a source of weakness,—they ate and did not hunt. They weakened their mothers when young, and when grown up were a temptation to surrounding tribes. Hence the cruel custom which made the primitive human hordes prey upon one another for wives.

Tylor, who has also called attention to exogamy, regards it as mainly due, not to infanticide, but to the beneficial effect of marrying out-and-out, and to the physiological evils of marrying in-and-in. This theory is favoured by established maxims, breeding in-and-in being perhaps held by public opinion as more noxious to the human species than professional breeders think it for animal stock. As an exogamous tribe increased and enlarged its territory, it may have become endogamous for practical reasons. Sir John Lubbock suggests another motive. "Endogamy seems to have arisen from a feeling of race pride, and a disdain of surrounding tribes, which were either really or presumably in a lower condition." Sir Henry Maine is very suggestive:—"The barbarous Aryan is not generally monogamous, but exogamous. He has a most prodigious table of prohibited degrees. The Mussulman, however, is not only polygamous, but endogamous; his law permits comparatively near relatives to intermarry. The comparative liberty of intermarriage is a part of the secret of Mahometanism's success in India."

Lewis Morgan, an American who had studied by personal intercourse the organization of the family among the Seneca Indians, into whose tribe he was adopted, says, in his *Ancient Society*, that exogamy and endogamy are not as antagonistic and contradictory to each other as they are supposed to be. According to him, the com-

munity at large is often practically endogamous, while the *gentes*, or set of families, which constitute it are rigorously exogamous. The lineage is in most cases through descent in the female line, and the males are obliged to marry into other gentes.

Family institutions are in themselves an interesting object of study, and they have besides a wide practical bearing, as they are everywhere inseparably connected with the rules of property and inheritance. They may be conveniently discussed under the following heads:—

Marriages communal and free to all members of the tribe—Heterism or Promiscuity—Woman Capture—Female Infanticide—Marriages communal, but restricted to certain sets of persons—Endogamy—Exogamy—Adelphogamy—Levirate—Polygamy—Polyandry—Marriages by Pairs—Monogamy—Courtships—Bridals—Marriage by trial—Nuptial customs—Divorce—Widowhood—Re-marriage—Birth Ceremonies—The *Couvade* (a custom which was held to be the quintessence of absurdity, until it was shown to be a symbol by which the father acknowledged the child, and especially the son, to be his)—Ceremonies observed at the giving of the name, at the cutting of the first tooth, and upon arrival at puberty or nubility—Old age and infirmities—Parents killed by their children through filial piety, or from poverty—Funeral rites, few of which, if any, can be explained unless they are looked at in the light of religious ceremonies.

*VI. Social Development.*—Sociology narrates how men became grouped in political communities, how they constituted authority and property, how they originated castes and guilds, and by degrees separated into high and low, rich and poor. Of all the fields in ethnology, none is at present cultivated with more care and intelligence than that which deals with the history of society, and none perhaps with a greater prospect of fruitful results.

*Grouping in Hordes, Tribes, or Nations.*—Man is a gregarious animal. Society develops intelligence, comfort, the sentiments of justice and equality, of fraternity, goodwill, and cheerfulness to a degree which would have been unattainable in a severe and prolonged solitude. The first hordes were scattered over vast areas, and were each very small. It is probable that they were recruited not only from within by births, but from without by capture of women and children, and by the voluntary or forced accession of their neighbours to their ranks. We draw a distinction between the human horde, which we hold to be superior only in degree to a herd of brutes, and the tribe, in which we recognize the first buddings of culture. The love of the mother for the young is an impulse to intelligence and devotion among all higher animals. The certainty of parturition at a period fixed for every species induces precaution and forethought. The rudiments of true humanity we conjecture therefore to have been the acknowledgment of motherhood by the tribe, and the first regular provision for the care of the expected infant. As it has been said already, the family had its origin in the gathering of children round their mother. These children became to one another brothers and sisters by the remembrance of the care they had enjoyed in common. They kept together; so did their children and their children's children; and the *gens* took shape and life.

Probably the original horde was by degrees remodelled into tribes by the gentes which had taken birth in it. The word gens, equivalent to clan, sept, or totem, being the best known of all, may be used in a general sense to denote all kindred institutions. The tribe became an organization of gentes. An Indian tribe, according to Lewis Morgan, is composed of several gentes, developed from two or more, all the members of which are intermingled by marriage, and all of whom speak the same dialect. To a stranger the tribe is visible, and not the gens. It is highly convenient for a tribe to contain at least two gentes, which, if they choose to intermarry, would find wives at their own door. A fundamental law of the

gens prohibited marriage between gentiles, or members of the same gens. For most communities were deeply averse to consanguineous marriages, which they branded with the infamous name of incest, though some others held them to be highly commendable. The original rule was that all descendants by the same mother were to be regarded as brothers and sisters, and they were soon forbidden to contract matrimonial unions. As there was no relationship by the father's side, the patriarch Abraham could in all propriety take his sister, or rather his half-sister, as a wife. And such a tribe, consisting of two gentes only, intermarrying constantly, might be composed of first cousins only, and be strictly endogamous nevertheless.

Further rights and duties of the gentiles were the reciprocal obligations of help, defence, and redress of injuries against any one from without. They had the same religious rites, and a common burial place. The archaic gens inherited the property of its members, as they were taken away by death, and redistributed it every year, or at stated periods. All children of earth return by death to her bosom, and all the gentiles were brought to rest in a common burial place. The gens was primarily a great motherhood, and the gentiles, all of them, were supposed to be brothers and sisters, and to live in their mother's home.

As in the course of time the gentes increased, they segregated to a certain extent, but maintained their association for certain common objects; the enlarged association was called a *phratría* or brotherhood. Each of the four tribes of the Athenians was organized in three phratrias, each composed of thirty gentes. The Roman *curia* was the analogue of the Grecian and the Iroquois phratrias.

In the normal course of events the tribes increased and segregated as the gentes had formerly done. And "as the gentes had recoalesced in phratrias, so did the tribes reunite in confederacies. Where one Indian tribe had divided into several, and the subdivisions occupied independent but adjacent territories, the confederacy reintegrated them in a higher organization, on the basis of the common gentes which they possessed, and of the affiliated dialects which they spoke. The confederacy had the gentes for its basis, and the mother language as the measure of its extent. Its formation required the highest skill. The Iroquois ascribed the origin of theirs to divine inspiration; they considered it to be the masterpiece of wisdom." To bring many tribes together, to conciliate the conflicting interests in a superior organization, and make it work, requires an intelligence much superior to that which is required for gaining victories in the battlefield. Therefore confederacies have been always rare achievements. The common course of events has been rather that tribes have become nations, not by peaceful and voluntary aggregation, but by the bloody work of war and conquest, by constant encroachments on the territory of neighbours, by killing part of them, and enslaving the rest.

*Authority.*—When not actually engaged in a war or in a hunting expedition, wild tribes are often without recognized chiefs. In case of need, in dangerous emergencies, natural superiority soon asserts itself, and the boldest, strongest, most intelligent, or most experienced steps forward as leader. With the children of nature authority is of a more transient and less definite character than with us. Their aggregations are, as a rule, very small. In order to understand the most ancient condition of human society, says Sir Henry Maine, all distances must be reduced, and we must look at mankind, so to speak, through the wrong end of the historical telescope. Many anthropologists are of opinion that civilization has increased the differences in the anatomy of man and woman, in the stature of giants and dwarfs. There is stronger evidence that it has increased intellectual differences. The oscillations on either

side of the average line of learning and intellect are widest in our populous and complicated communities, where the talented are more talented, and the stupid more stupid than elsewhere. In small bodies politic, there is not the same necessity for strict discipline as in the large ones. And the larger they grow, *totis paribus*, the more despotic they become. History has shown it to be the case with all great monarchies, which in times ancient and modern have been synonymous with despotisms. When conquering Rome overstepped the limits of the Italian territory, she ceased to be a republic, and despite the desperate efforts of her best citizens she became an empire. The larger the territory, the greater are the inequalities between the inhabitants, and the greater the danger of despotism. To our eyes kingdoms like those of Dahomey, of Ashantee, or of Uganda, may not appear very large, but to negroes, whose minds are unable to grasp any thing very complex, they seem immense. In fact, some savage rulers believe themselves to be real gods,—believe without a shadow of doubt that their ancestor created heaven and earth; they are persuaded that the limits of the habitable world are not far beyond the boundaries of their petty dominions. We are expressly told by travellers that their subjects hold them in greater reverence than divinities. The innumerable variety of governments is perplexing to ethnologists, who find often the most heterogeneous forms side by side, and see intelligent and courageous nations submit to a tyranny which would often appear intolerable to their neighbours. Forces are constantly in operation, of which some tend to increase the liberty of the citizen, and some to increase the authority of government. If we are believers in the general principle that self-government is the best, then we shall be astonished to find how often it has been obtained by nations which we deem much inferior to ourselves. So-called savages possess a degree of freedom and enjoy an absence of restraint which well might kindle the enthusiasm of the youthful readers of Fenimore Cooper, and provoke melancholy reflections in many people who feel over-governed, and ruled down, who complain that the price which we pay for the blessings of civilization is too high.

For the men who exercise power, it is dangerous not to have an eye open, if not to the general benefit, at least to the interest of some powerful class. This fact is often disregarded; historians easily overlook the circumstance that a ruler, however violent, rash, and headstrong, is in most cases but the tool, conscious or unconscious, of a party. Because orders are given in his name alone, it is not remembered that in reality he acts not in his personal capacity, but as the general manager of a joint-stock company with numerous shareholders. If we revert to the historic origin of authority, it is highly probable that the gens, to which is attributed the interior organization of the tribe, has been also the most efficacious constituent of political power. The most powerful gens taking the lead of the other gentes, the head of that gens became easily the regular chief of the tribe. Such a government might as easily become republican as monarchical or oligarchic. To the Commoners of the English Parliament corresponds the assembly of the people,—that is, of all the gentiles; to the senate, or Lords, corresponds the council of the elders and chiefs of gentes. Either the council, or the assembly, or both together, entrusted the executive power to one pre-eminent official, who may have exercised at once the functions of priest, general, and chief justice,—for in early times the cumulation of offices was the rule, and the division of labour was the exception. In his interesting book, *La Cité Antique*, which depicts society under the posterior gentile organization, M. Fustel de Coulanges represents the *paterfamilias* as being at once a tiller of the soil, a warrior, a judge in his own household—

invested with the power of life and death over his wife, his children, and his slaves,—a priest and an offerer of sacrifice, when officiating before his sacred hearth. The *rex* or *basileus*, acting on behalf of the whole city, was the representative *paterfamilias*, acting in the name and on behalf of all his brethren.

*Property* is an institution which stands second in importance to none. Property went on increasing in amount from the hunting and fishing period to the pastoral, and from the pastoral to the agricultural—not to stop there. Riches increased in proportion to the intelligence and to the amount of work done. As riches accumulated, so increased not only the greed but, what is an apparent contradiction, the need for them. The men in authority, the strong, took more than their share, the weak growing constantly weaker, the poorer becoming either paupers or slaves. When riches were made fairly abundant by agriculture, the primitive gens with maternal kinship had to give way to the gens with paternal kinship; for it was contrary to logic that the privileges of riches and power should be still bestowed by enslaved women, when the circumstances of family life established a sufficient certitude of paternity. Thus internal revolutions modified totally the character of the gens in the course of time. It had begun by being feminine in character, it ended in being exclusively masculine. Originally property was held in common by all gentiles; by degrees its ownership became restricted to constantly diminishing circles of relations, and finally an end was made of collective property; the principle of private ownership obtained the victory, and reigned supreme as it does now.

And when, in the leading states, the principle of collective property which underlay the gens had lost its vital force, the gens fell or was overthrown and crumbled to dust. This mighty fabric, the most considerable perhaps of all human institutions, has broken down everywhere, but it has not been totally destroyed. Its *débris* lie broadcast over the earth, from Rajputana to Scotland and Ireland, and thence to America. In the still existing *House or Village Communities in the East and West*, as described by Sir Henry Maine, we see living remnants of that institution in which formerly all ideas of peace, industry, justice, and progress had centred. Once the gens was all, and it was believed that it would remain all to all time. At that period, the gens was a political and a religious no less than a family institution; each gens was a complete state in itself. Where the gentes absorbed all the members of the tribe, leaving nobody out of its pale, and giving a fair share to all, the institution was perfectly compatible with progress, at least for a long time. But it happened otherwise in many instances, and especially among the gentes which are the best known to us, those of Greece and Rome. There the gentes took advantage of the fact that they were the first organized body to arrogate all power, and most obstinately they kept it, making themselves a privileged class, ruling a mob of paupers, exiles, fugitives, runaway slaves, and their progeny the *proletariate*. Theoretically the gens might have endured for ever, if it had consented to take up outsiders. But collective bodies lack generosity, especially when they are powerful. The gentiles went on increasing the number of non-gentiles by their raids and wars, conquering and enslaving other free men, until the privileged ones were outnumbered, outwitted, and finally ousted from power by the multitude of the non-possessors. And thus sovereignty, which for long ages rested upon the family system, rests now upon the territorial system.

VII. *Intellectual Development, Language, Literature, and Arts.*—To no other auxiliary science is ethnology so much indebted as to philology. Not long ago the two

sciences were confounded with each other, and purely linguistic disquisitions went under the name of "ethnographic researches," as in the *Atlas* of Balbi, where the word "ethnography" occurs perhaps for the first time (in 1826).

Formerly the words "nations" and "languages" were synonymous. In Genesis the confusion of the tongues is said to have caused the separation of mankind into nations. A language is to be considered as the collective brain of a nation; the vocabulary shows the richness of its ideas, the syntax how it works them. While our lexicographers count their words by the ten thousands, we are assured that the savage is scarcely able to use more than twelve hundred words, and that many English rustics have not more than four or five hundred words at their disposal. A nation's language is the sum of its developed intellect, the record of its previous intellectual efforts. From that store of accumulated ideas and feelings our children draw the best part of their information, the most of their morals. Our mother tongue is our intellectual motherland.

For a long time, the element of race had been considered to be the greatest of all ethnological factors. Some even drew between Aryans and non-Aryans a line which would have been scarcely sharper if it had been between men and brutes. But after all, affinity of blood seems to have much less influence on men than the affinity of religions, and the affinity of religions less than the affinity of languages, at least in modern times,—for this reason, that language is the sum and religion a part only of our thoughts. A curious example of the power of language is observed in Roumania. Its inhabitants claim descent from Italian colonists, an obscure and certainly very mixed stock. For a time they were thought to have disappeared among the Slavs, whose Greek religion had already conquered them, and already acted powerfully on their language. But the language which had been brought to the plains of Moldo-Wallachia by poor soldiers and ignorant peasants stubbornly resisted extinction, and at last obtained the advantage over its invader, because as a vehicle of thought it brought with it the ideas and memories which are preserved in the pages of Virgil and Cicero, and finally the Roumanians elected to enter into the fellowship of Latin nations. It is the English language which in the United States has welded into one nation the motley crowd of immigrants landing from so many countries and professing so many religions.

Ethnologists, as such, are not concerned to inquire into the difficult problem of the origin of languages, which is to be worked out by the professed philologists. The solutions, however, which seem self-evident to linguists on mere philologic grounds, if they do not tally with ethnological experience, will have their acceptance postponed by ethnologists until further examination. For example, some authors will have it that nations must be considered as belonging to different races, and descended from ancestors of totally inconsonant minds, if one uses as a prefix what another would use as a suffix, or if one puts the attribute after the substantive when another puts it before. Between the *isolating*, the *agglutinative*, and the *inflectional* languages they have drawn the same distinctions as those established by the botanists between acotyledonous, monocotyledonous, and dicotyledonous plants; and they want the ethnologists to classify nations accordingly,—the last of the three, *i.e.*, the inflectional, being supposed to have a preponderance as great as that of the vertebrates over the invertebrates. And, furthermore, considering that the inflectional languages are less sonorous and abundant in forms than they were in their earlier stages, philologists too much to heart what they regarded as a linguistic deterioration. From that degenerative theory there is an easy transi-

tion to the belief that language is a divine revelation, or at least a sudden and spontaneous birth in the soul of every race (Renan). This theory, which presupposes the plurality of races, may be very acceptable to philologists, but is one with which most ethnologists do not agree. Where philologists see a difference in nature, ethnologists see rather a difference in degree; they object that "it must not be by any means supposed that complexity in language implies excellence or even completeness."

What mere philologists call debasement, philologists who are also philosophers call improvement. Mere artists or calligraphers may deplore the deterioration of hieroglyphics with elaborate drawings into a cursive, demotic writing, which has led to the adoption of our unpicturesque alphabets. "The phonic alteration," says an able linguist, M. Michel Bréal, "helped the emancipation of thought; it furthered the first steps of man in the path of abstract thought; it gave to the human mind the same assistance as algebra gives to the mathematician, when it substituted signs more abstract still." Mr Sweet (*Language and Thought*), considering it an amelioration that English has cast off "an effete inflexional system," does not lament that "English is to be compared in part with agglutinating in part with isolating languages, such as Chinese."

These reservations are made not because ethnologists think little of philology applied to ethnologic research, but rather because they know that alliance to be a vital necessity, and hope by concerted action to increase its usefulness. Philology, like history, was long limited to a study of the Greek and Latin languages, until it was made a totally new science by the discovery of Sanskrit, and by the vocabularies which travellers collected from all parts of the globe. In the hand of modern observers, such as Bopp, Schleicher, Fick, Max Müller, Friedrich Müller, Curtius, Pictet, philology has become a sort of telescope by which human sight penetrates the night of centuries long past. "By marvelous efforts of sagacity it has reconstituted the social state, the uses, the ideas, the beliefs of the ancient Aryas, whose moral history is now better known to us than some periods of Roman history. It has discovered bonds of parentage between nations, which, as the Greeks and Persians did, reproached each other with being barbarians, and it has described a diversity of origin between nations, which, as the Greeks and Egyptians, thought themselves to be closely allied" (Bréal). How the sagacity of the philologists adds to the achievements of ethnology is shown by Peschel, who thus sums up the results of their labours for finding out where was the cradle of our Indo-European ancestors:—

"When the ancient vocabulary of the primordial Aryan age is restored by collecting the roots common to all the members, we at the same time obtain an outline of the social condition of these nations in the most ancient period. We thus learn that they already tilled the ground, ploughed it with oxen, used carriages with wheels, kept cattle for the production of milk, and ventured on a neighbouring sea in rowing boats, but did not use sails. It is more than doubtful whether they smelted metals, especially as the name for bellows is not derived from the primordial place of abode. As they were not acquainted there with the ass and the cat, both ancient domestic animals in Africa, they had not as yet interchanged any of the treasures of civilization with the Egyptians. As they had the same terms for snow and winter, and the other seasons afterwards received different names, we may be certain that in ancient Arya there was an alternation of hot and cold months. In these primitive abodes dwelt bears, wolves, and otters, but there were neither lions nor tigers. It lay eastward of Nestus in Macedonia, which in the time of Xerxes was the limit of the European lion. It was also further north than Chuzistan, Irak-Arabi, and even than Assyria, where lions are still to be met with. It cannot have included the high lands of west Iran and the southern shores of the Caspian Sea, for tigers still wander in search of prey as far as those districts. Hence every geographer will probably agree that the Indo-Europeans occupied both slopes of the Caucasus, as well as the remarkable gorge of Dariel, and were in the habit of visiting either the Euxine or the Caspian Sea, perhaps both."

Mr Hyde Clarke shows that the original names of some African weapons are still names of stones,—an interesting circumstance, as the belief gains ground in some quarters that the despised Negro invented the smelting and the working of iron, a discovery which ranks second to none, and to which are mainly due the wonders of our modern civilization in this, the true Iron Age. Geiger claims to have proved that, as recently as the Homeric period, men had a very imperfect and even deficient perception of colours. Bolder still is Herr Fick, who has construed some hundreds of proper names by which the "Proethnians," supposed ancestors of the Celts, Germans, and Zends, may have been called before Sanskrit was yet born. Many other proofs might be given that philologists, who quite recently dared not, as it were, lose sight of the Mediterranean coasts, now navigate the most distant seas, far beyond the Ultima Thule of yore.

Language is the highest work of a nation, a work of art, and often a nation's only one. The study of languages leads to the study of popular poetry, of songs, of dances, and of music, all subjects upon which we possess a mass of information, but little knowledge. The details are ready, collected from all parts of the world, but the synthesis has not yet been made.

It is a curious fact that very accurate and even artistic etchings made on bone or horn, with the point of a flint, are found in the remains of the early stone age, but are wanting not only in the later part of the stone age, but also throughout the so-called bronze period. The ornamentation of pottery was very rude and scanty, progressing very slowly, but in the age following it seems to have taken a start—imitations of plants and animals being essayed. The Eskimo are fair draughtsmen. The Indians draw like children. Polynesians do not draw, but carve and paint. The Bushmen and Kaffirs have no idea of perspective, the Chinese very little. Drawing on a flat surface requires a certain degree of thought, and encountered probably much prejudice, because it was supposed to catch the shadow, or the soul of the objects. Carvings and mouldings in clay were easier, not to execute, but to attempt. It is beyond question that personal ornament was the beginning of art. Savages are passionately fond of adorning their persons with painting (probably the hunters of Cro-Magnon, Schussenried, and Thayingen bedaubed themselves with the ochre found near their bones), with tattooing, with all sorts of necklaces, bracelets, necklets, armlets, leggings, breast-plates, and stomachers, with fantastic head-gear, and quills, pearls, shells, and rings through the nose, ears, and lips. Even the front teeth have been inlaid with shining knobs, as among the Dyaks. We are, in this department, encumbered by a mass of details, which require to be systematically arranged, examined, and compared, in order that they may become part of a science, or even a science by itself.

VIII. *Religious Development, Myths and Legends, Magic and Superstition.*—Controversies have been waged upon this question—"Do any tribes exist which have no kind of religion?" What made the dispute interminable, and of little profit, is the fact that the disputants attached different meanings to the same word. Reports of missionaries were quoted, some affirming, some denying. Thus facts have been brought forward to prove either that the Russian peasants are very religious or very irreligious. The truth is that the religion of these simple-minded people is so mixed up with superstition that rigorous critics who maintain that superstition is the reverse of religion, as much as of morals, have no difficulty in proving that many of these country folks practice real shamanism under the cloak of Greek Christianity. But ethnologists are not expected to be either severe or indulgent; they have to give a defini-

tion covering the ground occupied by all religions, be they true or false. Their definition of the word, although a philosophic one, falls in with that which many theologians have formulated. "Religion is the feeling which falls upon man in the presence of the unknown." Man fears and must fear the unknown, because the unknown may be dangerous and terrible, because the infinite is hidden in the unknown. Man personifies the Unknown; when his mind is strongly excited, he cannot do otherwise. And that personification he seeks to propitiate.

As regards superstitions, while moralists and social reformers consider them to be baneful weeds which it is their duty to dig out and destroy, ethnologists consider them as wrecks of former beliefs, over which the waves of many centuries have washed. The symbol has remained, but its significance is gone; the comprehension, never more than superficial, became lost, but the reverence was great, and survived. Thus, paganism underlies Christianity still, especially among ignorant rustics, a fact which the word pagan itself illustrates (*paganus*, country folk).

Classic paganism, the product of a late idealism, was in its theory too philosophic to be understood except by the few; it propounded the worship of the sun and æther as male principles and sources of light, heat, and life. It had succeeded to the so-called chthonic religions, of which Professor Bachofen (*Mutterrecht*) and M. Jules Baissac (*Les Origines de la Religion*) have been the exponents. The Earth Mother was then the centre of stellar, solar, and lunar deities, lunar deities especially, the moon being often considered as of the male sex. From internal evidence, it may be supposed that these religions were devised under the influence of agricultural practices, when the idea of paternal filiation began to be slowly evolved from the maternal. And the chthonic religions were themselves in their origin an innovation upon animal worship, which corresponded to the rise of Totemism (McLennan, Spencer) upon Shamanism, and the still ruder Fetichism. The lowest religions are characterized by their containing the greatest proportion of magic and the least of science and morality. In that stage, the invisible powers of witchcraft and sorcery are made to explain whatever is not understood,—even the fact of natural death, the explanation of which one would have thought to be the first to loom on these dark intelligences. But seeing around them so many violent deaths, among men as well as among brutes, they believed that all death, and even all diseases, were owing to magic.

Magic has been analysed. Its essence is the belief in the action of spirits or souls of dead men. That belief is called ANIMISM (*q. v.*) by Tylor, whose researches on the subject constitute one of the most important results of English ethnology. He says—

"Animism characterizes tribes very low in the scale of humanity, and thence ascends, deeply modified in its transmission, but from first to last preserving an unbroken continuity, into the midst of high culture. Animism is the groundwork of the philosophy of religion, from that of the savages up to that of civilized men; but although it may at first seem to afford but a meagre and bare definition of a minimum of religion, it will be found practically sufficient; for where the roots are, the branches will generally be produced. The theory of animism divides into two great dogmas, forming parts of one consistent doctrine; first, concerning souls of individual creatures, capable of continued existence after death; second, concerning other spirits, upward to the rank of powerful deities. Spiritual beings are held to affect or control the events of the material world, and man's life here and hereafter; and it being considered that they hold intercourse with men and receive pleasure or displeasure from human actions, the belief in their existence leads naturally, sooner or later, to active reverence and propitiation."

Indications are not wanting that prehistoric men were addicted to magic. In the Swiss lake-dwellings, crescent-shaped implements in baked earth have been found, which are supposed by some to be amulets, and related to moon

worship; and the absence of all bones of hares in the kitchen middens is generally explained by a superstitious avoidance of that animal's flesh.

Superstition or prehistoric religion still survives even in the heart of civilized Europe, where many of its bizarre and grotesque practices are to be found similar to those prevailing in China, and in the dark corners of Africa and Australia. How is this universal prevalence to be explained? Does it prove that the communications between distant members of the human family were more active than it is commonly supposed that they were? Does it prove that we did all come from the same stock? Or is the true explanation this, that the similarity of effects results from the similarity of causes, and that men evolved analogous beliefs because they have analogous minds? Mr Herbert Spencer (*Animal Worship*) is of opinion that, considering the sum of knowledge which primitive men possessed, and the imperfection of their signs of language and thought, the conclusions which they arrived at were after all the most reasonable. Till recently sensible men did but shrug their shoulders when they heard of superstitions. They had little thought of collecting them with care, and still less of studying them in earnest as subjects of scientific inquiry, and precious as embodying the oldest accessible thoughts of mankind. Some beginning has been made. Brandes, Henderson, and Wright in England, Wuttke in Germany, Kreutzwald in Estonia, Grohmann in Bohemia, Dennys and Doolittle in China, and many others have collected precious documents. A mass of material lies scattered about, especially in books of travels. Explorers in this field of inquiry ought not to be repelled by the amount of nonsense they encounter; the more absurd the text, the more ancient and genuine it probably is. Most things would be inexplicable if they stood alone, but one explains another. Here, as in natural history, the value and significance of the individual object is best perceived when it is examined in the series to which it belongs.

Fairy tales and popular legends find little favour with many enlightened people. Of course if these tales were to be taken literally, they would be pronounced pure nonsense, but their meaning, like that of poetry, is an ideal one; they are intended to please and invigorate the imagination of children. In ancient times, when their primitive form and meaning were less altered, they had a higher purpose. Those mixed up with animal stories of a certain character appear to have been Buddhist parables intended to teach fairness and goodness towards "the weaker brethren." But although twenty centuries old and more, they belong to the later creations in the development of human thought. The oldest stories are scraps of prehistoric myths, cosmologies, and epics. Although they have been patched up a hundred times, they have still kept enough of their original traits to be still recognizable.

And it is not only popular tales and proverbs which are to be regarded as records of ancient lore, but also children's plays, nursery rhymes, and infantine dances, as has been pointed out by Tylor and by Rochholz (*Kinderlied und Kinderspiel*). Among Kirghiz, Chinese, Redskins, and Bantu negroes, counterparts have been found to the *Iliad* and the *Odyssey*, to the grand myths of Hercules and Prometheus, to the traditions of the Argonauts, of Danae, Andromede, Proserpine, not to forget the most charming romance of Psyche. During the Middle Ages many of those tales were bedaubed with theological additions, and transformed into hagiologies and "Golden Legends." As such they had a separate existence, but fortunately they did not obliterate the recollection of the originals from which they sprang. Struck with a happy idea, and wishing to prove that the moderns were as good as the ancients, Charles Perrault put his *Contes* into writing, which he little suspected to be